

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated polynucleotide comprising:
a nucleotide sequence encoding a the WUSCHEL polypeptide comprising at least 100 amino acids, wherein the amino acid sequence of the polypeptide has at least 80% identity to or SEQ ID NO: 6 or SEQ ID NO: 8, based on the Clustal alignment method, wherein the polypeptide is a WUS protein which stimulates *in vitro* growth of plant tissue.
- 2-3. (Cancelled)
4. (Previously Presented) The isolated polynucleotide of Claim 1, wherein the nucleotide sequence comprises SEQ ID NO:5, or SEQ ID NO:7.
5. (Cancelled)
6. (Currently Amended) An isolated polynucleotide comprising the ~~The~~ complement of the polynucleotide of any one of Claims 1, ~~3, and or~~ 4, wherein the complement and the polynucleotide consist of the same number of nucleotides and are 100% complementary.
- 7-10. (Cancelled)

11. (Currently Amended) A chimeric gene comprising the polynucleotide of any one of Claims 1, ~~3~~, and 4, operably linked to a regulatory sequence.
12. (Currently Amended) A transgenic plant comprising the ~~chimeric gene~~ polynucleotide of claim ~~44~~ 1.
13. (Original) The transgenic plant of Claim 12, wherein the plant is corn, soybean, wheat, rice, alfalfa, sunflower, canola, or cotton.
14. (Currently Amended) A seed from the transgenic plant of Claim 12, wherein the seed comprises the polynucleotide.
15. (Original) The seed of Claim 14, wherein the seed is from corn, soybean, wheat, rice, alfalfa, sunflower, canola, or cotton.
- 16-18. (Cancelled)
19. (Currently Amended) A method for inducing meristem proliferation in a plant cell comprising:
 - (a) transforming a plant cell with the ~~chimeric gene~~ polynucleotide of Claim ~~44~~ 1 operably linked to a regulatory sequence operable in the plant cell; and,
 - (b) expressing the polynucleotide ~~for a time sufficient to produce~~ induce meristem proliferation.
20. (Currently Amended) The method of Claim ~~49~~ 42 further comprising growing the ~~proliferated meristem~~ transformed plant cell under plant growing conditions to produce a regenerated plant.

21. (Currently Amended) A plant produced by the method of Claim 20, wherein the plant comprises the ~~chimeric gene~~ polynucleotide.
22. (Original) The plant of Claim 21, wherein the plant is corn, soybean, wheat, rice, alfalfa, sunflower, canola, or cotton.
23. (Currently Amended) A method for positive selection of a transformed cell, comprising:
- (a) transforming a plant cell with the ~~chimeric gene~~ polynucleotide of Claim 44 1 operably linked to a regulatory sequence operable in the plant cell, and
 - (b) expressing the polynucleotide for a time sufficient to induce organogenesis and provide a positive selection means.
- 24-25 (Cancelled)
26. (Currently Amended) A method for transforming a plant cell comprising introducing the polynucleotide of any one of Claims 1, ~~3~~, and 4 into the cell.
27. (Previously Presented) The transformed plant cell produced by the method of Claim 26, wherein the plant cell comprises the polynucleotide.
28. (Currently Amended) A method for transforming a plant cell comprising introducing the ~~complement~~ polynucleotide of Claim 6 into the cell.
29. (Currently Amended) The transformed plant cell produced by the method of Claim 28, wherein the plant cell comprises the polynucleotide ~~complement~~.

30-35. (Cancelled)

- 36. (Previously Presented) The method of claim 26, further comprising growing the transformed plant cell under plant growing conditions to produce a regenerated plant.
- 37. (Previously Presented) The method of claim 28, further comprising growing the transformed plant cell under plant growing conditions to produce a regenerated plant.
- 38. (Previously Presented) A transformed plant produced by the method of claim 36, wherein the plant comprises the polynucleotide.
- 39. (Currently Amended) A transformed plant produced by the method of claim 37, wherein the plant comprises the polynucleotide complement.
- 40. (Previously Presented) The plant of claim 38, wherein the plant is corn, soybean, wheat, rice, alfalfa, sunflower, canola, or cotton.
- 41. (Previously Presented) The plant of claim 39, wherein the plant is corn, soybean, wheat, rice, alfalfa, sunflower, canola, or cotton.
- 42. (New) The method of Claim 19 wherein the polynucleotide is integrated into the plant cell genome to produce a transformed plant cell comprising the polynucleotide.